

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

46. (currently amended) An electrical system resulting in reduced cross-talk, comprising:

- first and second spaced-apart ground planes;
- third and fourth spaced-apart ground planes, said first and second spaced-apart ground planes positioned to one side of said third and fourth spaced-apart ground planes;
- a first conductor, said first conductor positioned between said first and second spaced-apart ground planes;
- a second conductor, said second conductor positioned between said third and fourth spaced-apart ground planes and laterally spaced a predetermined distance from said first conductor, the space between said first and second conductors being substantially fully occupied by air;
- a dielectric having a predetermined thickness positioned immediately between said first and third ground planes and said first and second conductors;
- wherein the predetermined lateral spacing between said first and second conductors and the predetermined dielectric thickness are selected to result in a virtual ground plane between said first and second conductors.

47. (previously presented) The electrical system of claim 46, wherein said first and second and said third and fourth spaced-apart ground planes comprise parallel conductors.

48. (previously presented) The electrical system of claim 46, wherein at least one of said first and second conductors has a mounting portion for securing the conductor to a substrate, and wherein the electrical system further comprises a solder mass secured to the mounting portion of the conductor.

49. (previously presented) The electrical system of claim 48, wherein the solder mass secured to said at least one conductor comprises a solder ball.

50. (previously presented) The electrical system of claim 48, wherein the solder mass secured to said at least one conductor is reflowable.

51. (currently amended) An electrical system resulting in reduced cross-talk, comprising:

first and second spaced-apart ground planes;

third and fourth spaced-apart ground planes, said first and second spaced-apart ground planes positioned to one side of said third and fourth spaced-apart ground planes;

a first conductor, said first conductor positioned between said first and second spaced-apart ground planes;

a second conductor, said second conductor positioned between said third and fourth spaced-apart ground planes and laterally spaced from said first conductor, the space between said first and second conductors being substantially fully occupied by air;

a dielectric positioned immediately between said first and third ground planes and said first and second conductors;

wherein at least a portion of the space between said first and second conductors has a ground potential.

52. (previously presented) The electrical system of claim 51, wherein said first and second and said third and fourth spaced-apart ground planes comprise parallel conductors.

53. (previously presented) The electrical system of claim 51, wherein at least one of said first and second conductors has a mounting portion for securing the conductor to a substrate, and wherein the electrical system further comprises a solder mass secured to the mounting portion of the conductor.

54. (previously presented) The electrical system of claim 53, wherein the solder mass secured to said at least one conductor comprises a solder ball.

55. (previously presented) The electrical system of claim 53, wherein the solder mass secured to said at least one conductor is reflowable.

56. (currently amended) An electrical system resulting in reduced cross-talk, comprising:

- first and second spaced-apart ground planes;
- third and fourth spaced-apart ground planes, said first and second spaced-apart ground planes positioned to one side of said third and fourth spaced-apart ground planes;
- a first conductor, said first conductor positioned between said first and second spaced-apart ground planes;
- a second conductor, said second conductor positioned between said third and fourth spaced-apart ground planes and laterally spaced a predetermined distance from said first conductor, the space between said first and second conductors being substantially fully occupied by air;
- a dielectric having a predetermined thickness positioned immediately between said first and third ground planes and said first and second conductors;
- wherein the predetermined lateral spacing between said first and second conductors and the distance between said first ground plane and said first conductor are selected to result in a virtual ground surface between said first and second conductors.

57. (previously presented) The electrical system of claim 56, wherein said first and second and said third and fourth spaced-apart ground planes comprise parallel conductors.

58. (previously presented) The electrical system of claim 56, wherein at least one of said first and second conductors has a mounting portion for securing the conductor to a substrate, and wherein the electrical system further comprises a solder mass secured to the mounting portion of the conductor.

59. (previously presented) The electrical system of claim 58, wherein the solder mass secured to said at least one conductor comprises a solder ball.

60. (previously presented) The electrical system of claim 58, wherein the solder mass secured to said at least one conductor is reflowable.

61. (currently amended) An electrical connector system, comprising:  
a signal conductor having a generally rectangular cross section shape with a pair of opposed first sides of a first length and a pair of opposed second sides of a second length, the first length being greater than the second length;  
a first ground conductor positioned adjacent a first one of the second sides and a second ground conductor positioned adjacent a second one of the second sides,  
a first dielectric positioned between the first ground and the first of the second sides and a second dielectric positioned between the second ground conductor and the second of said second sides,  
the signal conductor, first and second ground conductors, and first and second dielectrics forming a module having a height defined by said first length of the signal conductor and a thickness of the [~~first and second ground conductors and~~] first and second dielectrics and a width defined by a width of the first and second dielectrics, wherein the ratio of the height of the module to the width of the module is approximately unity when said module is placed side-by-side with other such modules.

62. (previously presented) The electrical system of claim 61, wherein the signal conductor has a mounting portion for securing the signal conductor to a substrate, and wherein the electrical system further comprises a solder mass secured to the mounting portion of the signal conductor.

63. (previously presented) The electrical system of claim 62, wherein the solder mass secured to the signal conductor comprises a solder ball.

64. (previously presented) The electrical system of claim 62, wherein the solder mass secured to the signal conductor is reflowable.

### **Amendments to the Drawings**

The enclosed sheet(s) of drawings include proposed changes to Figures 14 and 32 (shown in red), as well as the proposed addition of Figures 1b, 34, and 35. These proposed amendments and additions were requested by the Examiner during the in-person interview conducted on June 7, 2004.

In Figure 14, Applicants propose to add the cross-section line XXXIV – XXXIV and to also add reference numeral 352 to more clearly indicate the signal contact in the receptacle.

In Figure 32, Applicants propose to add the cross-section line XXXV – XXXV and to also add new reference number 500 to more clearly indicate the signal contact in the receptacle.

Figure 1b has been added to show side-by-side “I-beam” modules, as requested by the Examiner. Figures 34 and 35 have also been added at the request of the Examiner, to better illustrate the “I-beam” geometry of the connectors of Figures 14 and 32.